



Texaco USA

Box 5197X
Bakersfield, CA 93388
805 399 2961

CONTROL NO. 88-0066
ENGINEER KAW
DUE DATE 2-22-88

February 5, 1988

GOV STATE & LOCAL GOVERNMENT

APPROVED BY _____
DATE _____

California Regional Water Quality Control Board
Central Valley Region
3614 E. Ashlan Avenue
Fresno, CA 93726

Attn: Mr. Kenneth A. Wilkins

Gentlemen:

Thank you for the opportunity to review the draft NPDES permit for our proposed discharge into Cawelo Reservoir B (see Attachment 1). There are several provisions in the draft that are inconsistent with our proposal and we appreciate your willingness to consider our suggestions for improvement. Many of our concerns have been discussed by Mr. L. R. Landis and Mr. K. A. Wilkins and satisfactory alternatives have tentatively been worked out. These issues and our proposed resolution are presented below for your further review and concurrence. As requested by Mr. Wilkins, we have also included copies of laboratory data to document the reported water quality information that was presented in our submittal dated November 9, 1987 (see Attachment 2).

Two major problems we see concern the Effluent Limitations and the Receiving Water Limitations which have been proposed on Page 5 of Attachment 1. The proposed Effluent Limitations fail to take into account the fact that dilution water will usually be available in the pipeline. At other times, dilution will be provided by the water already in Reservoir B or by water brought in by other conveyances. The water quality standards developed for the Basin Plan to protect ground water should be applied to the water in Reservoir B, not to the water in the pipeline. We believe the following suggested revision is also consistent with the federal Clean Water Act.

B. Effluent Limitations

1. The discharge of effluent to Cawelo Pipeline in excess of the following limits is prohibited:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>
Flow	mgd	21.0	42.0
Oil and Grease	mg/l	35	35

2. The discharge of effluent into Reservoir B (or the Distribution Canal) in excess of the following limits is prohibited:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>
Specific Electrical Conductance	umhos/cm	1500	2000
Chloride	mg/l	275	300
Boron	mg/l	2.0	2.0

The proposed Receiving Water Limitations should reflect the provisions of the Basin Plan for the Poso Creek Subarea as shown in Attachment 3. The limitations established for Texaco's existing NPDES permit for the Beardsley and Carrier Canals should not be used for guidance, because these limitations were based on considerations for the Kern River Subarea and for the water management practices of the North Kern Water Storage District. Mr. Wilkins has informed us that his primary concern is for the maximum boron concentration in Reservoir B; that it should not exceed the value that the Cawelo Board is willing to accept. We have requested Mr. John Jones, Manager of the Cawelo Water District, to communicate the District's support of our proposed boron limit (1.0 mg/l) to you. The following change is recommended:

C. Receiving Water Limitations

1. The collective discharge of oilfield waste waters shall not cause the following constituent levels in Reservoir B to be exceeded:

<u>Constituent</u>	<u>Units</u>	<u>Daily Maximum</u>
Specific Electrical Conductance	umhos/cm	1000
Chloride	mg/l	200
Boron	mg/l	1.0

In addition, there are several instances throughout the draft permit where Texaco's reclaimed discharge is inaccurately referred to as "waste water" or "waste disposal". Without listing each occurrence, it is requested that more accurate terminology, such as "reclaimed water", "effluent", "discharge", or "produced water" be substituted. While it can be argued that water presently being discharged into the Beardsley Canal can be described as "waste water", because it has no value to Texaco (ie. Texaco pays for its removal), the reclaimed water to be discharged into Reservoir B will be bought and paid for by the Cawelo Water District and used for agricultural purposes, not for purposes of disposal. This water has a value and its reclamation and sale for useful purposes does not constitute waste disposal as defined in the California Water Code (see Attachment 4). Please inform us if you require additional documentation that the water will indeed be sold; we believe that our proposed terminology presents a more accurate and fair description of our proposal for your Board to consider.

There are several additional revisions that have been discussed, most of which can be described as clarification. As suggested by Mr. Wilkins, we have rewritten portions of the draft permit. For convenience, deleted text has been bracketed (e.g. {Deleted Text}) and suggested additions have been underlined (eg. Additional Text). The page numbers refer to the draft permit (Attachment 1).

Page 1

3. Approximately one-half of the {waste} produced water, up to 21.0 mgd, is reused for enhanced recovery purposes. {waste} Reclaimed water is produced into steam and hot water and then reinjected into oil bearing formations to increase production. The remaining {waste} water, up to 21.0 mgd, (or up to 42.0 mgd in emergencies) will be discharged via the Cawelo pipeline into Reservoir B (Discharge 001) of the Cawelo Water District (District) northwest of Bakersfield in Kern County (Figures 1 and 2).
4. Prior to discharge, all {waste} reclaimed water {is} will be treated for the removal of oil and grease and inorganic sediment. Treatment consists of mechanical separation, sedimentation, {nitrogen gas flotation} and air flotation.

Page 2

13. In the event of a simultaneous Reservoir B and Distribution Canal shutdown, Texaco will either store the {waste} reclaimed water until such time that Reservoir B or the Distribution Canal are operational or will discharge the {waste} water to alternate locations governed by Waste Discharge Requirements Order No. 85.065 or into injection wells governed by permits issued by the California Division of Oil and Gas.
14. The {waste stream} effluent that is discharged into the Cawelo pipeline exhibits the following characteristics:

<u>Constituent</u>	<u>Average Annual Concentration</u>	<u>Concentration Range</u>
Specific Electrical Conductance	1100 umhos/cm	1000 to 1700 umhos/cm
Chloride	185 mg/l	160 to 210 mg/l
Boron	2.1 mg/l	1.9 to 2.7 mg/l
Oil and Grease	25 mg/l	20 to 35 mg/l

Page 3

16. The Board adopted a Water Quality Control Plan for the Tulare Lake Basin (5D) on 27 July 1975. For the Poso Creek Subarea, the Plan contains the following maximum salinity limits for discharges to surface waters or to stream channels and areas that may recharge good quality ground waters:

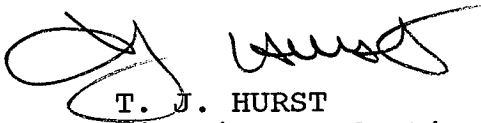
<u>Constituent</u>	<u>Units</u>
Specific Electrical Conductance	1000 umhos/cm
Chloride	200 mg/l
Boron	1.0 mg/l

Suggested revisions to the "Monitoring Program" and the "Information Sheet" are attached. (see attachments 5 and 6). In the "Information Sheet" we have attempted to accurately describe the differences between the proposed Cawelo permit and our existing permit to discharge into the Beardsley Canal, to account for differences in limitations. Suggested revisions to the "Monitoring Program" clarify which measurements should be made at each location. For example, the flow rate of Texaco's

discharge into the Cawelo pipeline and the combined flow discharged, from the Cawelo pipeline would each be measured continuously, but total flow through Reservoir B would not. In addition, we are proposing daily sampling for electrical conductance (salinity) for Texaco's discharge into the pipeline in exchange for a less - frequent sampling schedule for the electrical conductance at the discharge from the pipeline.

Your willingness to discuss these matters prior to the hearing is greatly appreciated. Please telephone Mr. Landis if you have any questions or comments.

Sincerely,



T. J. HURST
District Production Manager
Bakersfield District

LRL/tmr
Attachments
A56.ENV

cc: Mr. John Jones, Cawelo Water District

**ATTACHMENT 5
MONITORING AND REPORTING PROGRAM**

The discharger shall submit within 15 days of the adoption of this order (or no less than 30 days prior to commencing to discharge) for concurrence by the Executive Officer, the locations of all sampling stations.

{Waste discharge} Effluent and receiving water samples shall be analyzed {for the following} as follows:

A. Texaco's discharge into the Cawelo Pipeline

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Flow	mgd	Continuous	--
Oil and Grease	mg/l	Grab	2/month
Specific Electrical Conductance	umhos/cm	Grab	Daily

B. The combined discharge from the Cawelo Pipeline

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Flow	mgd	Continuous	--
Specific Electrical Conductance	umhos/cm	Grab	2/month
Boron	mg/l	Grab	2/month
Chloride	mg/l	Grab	2/month

C. Cawelo Reservoir B (or the Distribution Canal)

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Specific Electrical Conductance	umhos/cm	Grab	2/month
Boron	mg/l	Grab	2/month
Chloride	mg/l	Grab	2/month
Oil and Grease	mg/l	Grab	2/month

{WASTE DISCHARGE MONITORING}
{RECEIVING WATER MONITORING}
REPORTING

The Discharger shall implement the above monitoring program on the effective date of this Order (or upon commencing to discharge). Monitoring reports shall be submitted to the Board for each month by the 15th day of the following month {beginning within 30 days of the adoption of this Order}.

ATTACHMENT 6
INFORMATION SHEET

Texaco Producing, Inc. {operates a wastewater} proposes to operate an oil field water treatment and {disposal} reclamation facility in the Kern River oil field immediately northwest of Bakersfield {near the Kern River}. The facility {handles} will reclaim or recycle up to 42.0 mgd of {waste} ground water {generated} that is pumped to the surface in the production of crude oil in Texaco's operations in the Kern River, Kern Front, and Poso Creek oil fields. Most of the {Waste} water, up to 21.0 mgd, {is} will be reclaimed and recycled for enhanced recovery processes (injection of steam and hot water into oil producing zones). The remaining water (up to 21.0 mgd or 42.0 mgd in emergencies) will be {disposed of} discharged by pipeline to Cawelo Water Storage District's Reservoir B (Discharge 001) for agricultural use. The discharge has previously been governed by Waste Discharge Requirements Order No. 85-065 (NPDES No. CA0078352) adopted in March 1985. Order No. 85-065 permits the discharge of produced {waste} water to the Beardsley or Carrier Canal, separately or in combination, with the total discharge not to exceed 7.4 mgd. Discharges to the Beardsley or Carrier Canals will continue to be governed by Order No. 85-065 and should be considered to be distinct from discharges to Cawelo Reservoir B. Texaco will retain the right to discharge to the locations stipulated in NPDES permit No. CA0078352.

Prior to discharge, {waste} the reclaimed water {is} will be

treated to remove oil and grease and inorganic sediment, using mechanical separation, sedimentation, {nitrogen gas flotation} and air flotation. The {oil field waste} reclaimed water that will be discharged into the Cawelo pipeline for transportation to Reservoir B exhibits the following characteristics:

Electrical Conductivity <u>(micromhos/cm)</u>	Chlorides <u>(mg/l)</u>	Boron <u>(mg/l)</u>
1000 to 1700	160 to 210	1.9 to 2.7

The {wastewater will be transported to Reservoir B via the} Cawelo pipeline {, which} will originate at the Kern River, just upstream from the head of the Beardsley Canal.* In addition to augmenting Cawelo Water Storage District's water resources, the pipeline will provide flexibility and enable the District to transport {part of} its Kern River water allotment at {greatly reduced costs} all times. {Once} Prior to its discharge{d} into Reservoir B, the water {is} will be mixed with District water and ultimately used for irrigation within the District, thereby allowing a beneficial use of the {waste} reclaimed water.

*Texaco and the Cawelo Water Storage District jointly propose to construct the pipeline upon approval of the {waste discharge requirements} NPDES permit.

ATTACHMENT 2

WATER QUALITY DATA



Texaco Producing, Inc.
P. O. Box 5197-X
Bakersfield, California 93388
Attention: Kerry Martin

WATER ANALYSES

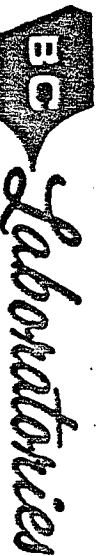
Date Reported: 08/27/87
Date Received: 08/17/87
Laboratory No.: 16404-16411

WEMCO # 8

Site & Time	Benzene ug/l	Arsenic mg/l	Beryllium mg/l	Cadmium mg/l	Chromium mg/l	Nickel mg/l	Lead mg/l	Oil & Grease mg/kg
08/11/87 7:30PM	N/D	0.05	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	6.2
08/12/87 3:30AM	N/D	0.05	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	10.1
08/12/87 11:30AM	N/D	0.05	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	6.7
08/12/87 7:30PM	N/D	0.05	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	9.7
08/13/87 3:30AM	N/D	0.05	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	7.2
08/13/87 11:30AM	N/D	0.05	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	10.0
08/13/87 7:30PM	N/D	0.05	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	10.7
08/14/87 3:30AM	N/D	0.05	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	10.1

MRL: 0.5 0.001 0.01 0.005 0.01 0.05 0.01 1.
Method: EPA 602 *206.3 *200.7 *200.7 *200.7 *239.2 *413.1

*Methods for Chemical Analysis of Waters and Wastes.
MRL refers to minimum reporting level.



Texaco Producing, Inc.
P. O. Box 5197-X
Bakersfield, California 93388
Attention: Kerry Martin

WATER ANALYSES

Date Reported: 08/27/87
Date Received: 08/18/87
Laboratory No. 16688 to
16699

MEMCO # 3

Date & Time	Benzene ug/l	Arsenic mg/l	Beryllium mg/l	Cadmium mg/l	Chromium mg/l	Nickel mg/l	Lead mg/l	Oil & Grease mg/kg
08/14/87 7:30PM	N.D.	0.04	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	6.
08/15/87 3:30PM	N.D.	0.04	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	6.
08/15/87 11:30AM	N.D.	0.04	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	7.
08/15/87 7:30PM	N.D.	0.04	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	12.
08/16/87 3:30PM	N.D.	0.04	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	8.
08/16/87 11:30AM	N.D.	0.04	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	8.
08/16/87 7:30PM	N.D.	0.04	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	8.
08/17/87 3:30AM	N.D.	0.04	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	7.
08/17/87 11:30AM	N.D.	0.04	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	7.
08/17/87 7:30PM	N.D.	0.04	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	29.
08/18/87 3:30AM	N.D.	0.04	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	26.
08/18/87 11:30AM	N.D.	0.04	(-) 0.01	(-) 0.005	(-) 0.01	(-) 0.05	(-) 0.01	*

*No container submitted for Oil & Grease.

MRL: 0.5 0.001 0.01 0.005 0.01 0.05 0.01 1.
Method: EPA 602 *206.3 *200.7 *200.7 *200.7 *239.2 *413.1

*Methods for Chemical Analysis of Waters and Wastes.
MRL refers to minimum reporting level.

Texaco Producing, Inc. - Kern River
 P. O. Box 5197-X
 Bakersfield, California 93388
 Attention: Mr. Larry Landis

WATER ANALYSIS

Sample Description: J.W.P. Beardsley 1/30/87 sampled by David Rittenhouse

Constituents	mg/liter	EPA Method
Calcium	22	200.7
Magnesium	3.5	200.7
Sodium	142	273.1
Potassium	7.9	258.1
Carbonate	0.	310.2
Bicarbonate	240	310.2
Chloride	108	407C Std. Methods 16th ed.
Sulfate	42	375.2
Nitrate	(-) 0.4	353.2
Fluoride	0.54	340.2
Iron	0.13	200.7
Manganese	0.09	200.7
Arsenic	0.02	206.3
Copper	(-) 0.01	200.7
Zinc	(-) 0.01	200.7
MBAS	0.1	512.B Std. Methods
Total Dissolved Solids @ 180 C	595	160.1
Boron	1.3	200.7
Total Phosphorus	0.5	424C (II) Std. Methods
Total Nitrogen	1.9	351.3
Ammonia-Nitrogen	1.2	350.1
Phenolics	(-) 0.05	420.2
Chemical Oxygen Demand	84	410.1
Color	5	110.2
Odor	12	140.1
pH	7.9	150.1
Electrical Conductivity,		
Microhmhos/cm @ 25 C	770	120.1
Hardness as CaCO ₃	69.4	
(-) refers to "less than".		

BY *J. J. Eglin*
 B C LABORATORIES, INC.
 J. J. Eglin

MAIN OFFICE: 4100 PIERCE ROAD, BAKERSFIELD, CA. 93308 PHONE 327-4911

J. J. EGLIN, REG. CHEM. ENGR.

INC.

LABORATORIES



AGRICULTURE

CHEMICAL ANALYSIS

PETROLEUM

EPA METHOD 625
BASE/NEUTRAL ACID EXTRACTABLES

DATE OF
REPORT: 3-2-87
LAB#: 1706

TEXACO - KERN RIVER
P.O. BOX 5197X
BAKERSFIELD, CA. 93388
ATTENTION: LARRY LANDIS
SAMPLE DESCRIPTION:
J.W.P. BEARDSLY

DATE SAMPLE
RECEIVED @ LAB:
3-30-87
DATE ANALYSIS
COMPLETED:
3-1-87

CONSTITUENT REPORTING STORET ANALYSIS DETECTION

ACENAPHTHENE	ug/1	34205	none detected	2.0
ACENAPHTHYLENE	ug/1	34200	none detected	2.0
ANTHRACENE	ug/1	34220	none detected	2.0
BENZO(a)ANTHRACENE	ug/1	34526	none detected	2.0
BENZO(b)FLUORANTHENE	ug/1	34230	none detected	2.0
BENZO(k)FLUORANTHENE	ug/1	34242	none detected	2.0
BENZO(a)PYRENE	ug/1	34247	none detected	2.0
BENZO(ghi)PERYLENE	ug/1	34521	none detected	2.0
BIS(2-CHLOROETHYL) ETHER	ug/1	34273	none detected	2.0
BIS(2-CHLOROETHOXY)METHANE	ug/1	34278	none detected	2.0
BIS(2-ETHYLHEXYL)PHTHALATE	ug/1	39100	none detected	2.0
BIS(2-CHLOROISOPROPYL) ETHER	ug/1	34283	none detected	2.0
4-BROMOPHENYL PHENYL ETHER	ug/1	34636	none detected	2.0
2-CHLORONAPHTHALENE	ug/1	34581	none detected	2.0
4-CHLOROPHENYL PHENYL ETHER	ug/1	34641	none detected	2.0
CHRYSENE	ug/1	34320	none detected	2.0
DIBENZO(a,h)ANTHRACENE	ug/1	34556	none detected	2.0
DI-N-BUTYL PHTHALATE	ug/1	39110	none detected	2.0
1,3-DICHLOROBENZENE	ug/1	34566	none detected	2.0
1,2-DICHLOROBENZENE	ug/1	34536	none detected	2.0
1,4-DICHLOROBENZENE	ug/1	34571	none detected	2.0
3,3'-DICHLOROBENZIDINE	ug/1	34631	none detected	2.0

B C LABORATORIES

LAB#: 1706
CONTINUED

CONSTITUENT	REPORTING UNITS	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
DIEHTYL PHTHALATE	ug/1	34336	none detected	2.0
DIMETHYL PHTHALATE	ug/1	34341	none detected	2.0
2,4-DINITROTOLUENE	ug/1	34611	none detected	2.0
2,6-DINITROTOLUENE	ug/1	34626	none detected	2.0
DI-N-OCTYLPHTHALATE	ug/1	34596	none detected	2.0
FLUORANTHENE	ug/1	34376	none detected	2.0
FLUORENE	ug/1	34381	none detected	2.0
HEXACHLOROBENZENE	ug/1	39700	none detected	2.0
HEXACHLOROBUTADIENE	ug/1	34391	none detected	2.0
HEXACHLOROETHANE	ug/1	34396	none detected	2.0
INDENO(1,2,3-cd)PYRENE	ug/1	34403	none detected	2.0
ISOPHORONE	ug/1	34408	none detected	2.0
NAPHTHALENE	ug/1	34696	none detected	2.0
NITROBENZENE	ug/1	34447	none detected	2.0
N-NITROSODI-N-PROPYLAMINE	ug/1	34428	none detected	2.0
PHENANTHRENE	ug/1	34461	none detected	2.0
PYRENE	ug/1	34469	none detected	2.0
1,2,4-TRICHLOROENZENE	ug/1	34551	none detected	2.0
ALDRIN	ug/1	39330	none detected	0.5
BENZYL BUTYL PHTHALATE	ug/1	34292	none detected	0.5
B-BHC	ug/1	39338	none detected	0.5
D-BHC	ug/1	34259	none detected	0.5
CHLORDANE	ug/1	39350	none detected	0.5
4,4'-DDD	ug/1	39310	none detected	0.5
4,4'-DDE	ug/1	39320	none detected	0.5
4,4'-DDT	ug/1	39300	none detected	0.5
DIELDRIN	ug/1	39380	none detected	0.5
ENDOSULFAN SULFATE	ug/1	34351	none detected	0.5
ENDRIN ALDEHYDE	ug/1	34366	none detected	0.5
HEPTACHLOR	ug/1	39410	none detected	0.5
HEPTACHLOR EPOXIDE	ug/1	39420	none detected	0.5
TOXAPHENE	ug/1	39400	none detected	0.5
4-CHLORO-3-METHYLPHENOL	ug/1	34452	none detected	50.0
2-CHLOROPHENOL	ug/1	34586	none detected	50.0
2,4-DICHLOROPHENOL	ug/1	34601	none detected	50.0
2,4-DIMETHYLPHENOL	ug/1	34606	none detected	50.0
2,4-DINITROPHENOL	ug/1	34616	none detected	50.0
2-METHYL-4,6-DINITROPHENOL	ug/1	34657	none detected	50.0
2-NITROPHENOL	ug/1	34591	none detected	50.0
4-NITROPHENOL	ug/1	34646	none detected	50.0
PENTACHLOROPHENOL	ug/1	39032	none detected	50.0
PHENOL	ug/1	34694	none detected	50.0
2,4,5-TRICHLOROPHENOL	ug/1	34621	none detected	50.0

B C LABORATORIES

LAB#:1706
CONTINUED

CONSTITUENT	REPORTING	STORET	ANLAYSIS	DETECTION
	UNITS	CODE	RESULTS	LIMIT
PCB-1016	ug/l	34671	none detected	0.5
PCB-1221	ug/l	39488	none detected	0.5
PCB-1232	ug/l	39492	none detected	0.5
PCB-1242	ug/l	39496	none detected	0.5
PCB-1248	ug/l	39500	none detected	0.5
PCB-1254	ug/l	39504	none detected	0.5
PCB-1260	ug/l	39508	none detected	0.5

Comments:

By J.J. Eglin
J.J. Eglin

Michael F. Walker
Analyst

PURGEABLE ORGANIC ANALYSIS
(WATER)

Texaco
 P.O. Box 5197X
 Bakersfield, Ca. 93388
 Date of Report: 2-5-87
 LAB No.: 1706

SAMPLE DESCRIPTION:
 J.W.P. Beardsly, 1-30-87

DATE
 SAMPLE DATE
 RECEIVED @ LAB:
 1-3-87
 DATE ANALYSIS
 COMPLETED:
 2-4-87

TEST METHODS: EPA 601 AS RECEIVED BASIS

CONSTITUENT	REPORTING UNITS	STORET CODE	ANALYSES RESULTS	MINIMUM REPORTING LEVEL
Bromodichloromethane	Hg/l	32101	none detected	0.5
Bromofom	Hg/l	32104	none detected	0.5
Bromomethane	Hg/l	34413	none detected	0.5
Carbon tetrachloride	Hg/l	32102	none detected	0.5
Chloroethane	Hg/l	34311	none detected	0.5
2-Chloroethylvinyl ether	Hg/l	34576	none detected	0.5
Chloroform	Hg/l	32106	none detected	0.5
Chloromethane	Hg/l	34418	none detected	0.5
bis(2-Chloroethyl) ether	Hg/l	34273	none detected	0.5
Dibromochloromethane	Hg/l	32105	none detected	0.5
Dichlorodifluoromethane	Hg/l	34668	none detected	0.5
1,1-Dichloroethane	Hg/l	34496	none detected	0.5
1,2-Dichloroethane	Hg/l	34531	none detected	0.5
1,1-Dichloroethene	Hg/l	34501	none detected	0.2
trans-1,2-Dichloroethene	Hg/l	34546	none detected	0.5
1,2-Dichloropropane	Hg/l	34541	none detected	0.5
cis-1,3-Dichloropropene	Hg/l	34704	none detected	0.5
trans-1,3-Dichloropropene	Hg/l	34699	none detected	0.5

Analyst

LABORATORIES, INC.

J. J. EGLIN, REG. CHEM. ENGR.

4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911



Date Reported: 10/6/86
Date Received: 9/15/86
Laboratory No.: 16455 - 16457

Texaco Producing, Inc.
P. O. Box 5197-X
Bakersfield, California 93388
Attention: Mr. Rob Segar

WATER ANALYSES

JWP

Sample Descriptions:

#1 - Sample C
#2 - Sample D
#3 - Sample F

Constituents, mg/liter			
	#1	#2	#3
Fluoride	0.62	0.63	0.62
Iron	0.08	0.53	0.20
Zinc	(-) 0.01	0.01	0.02
Chromium	(-) 0.01	(-) 0.01	(-) 0.01
Selenium	(-) 0.005	(-) 0.005	(-) 0.005
Boron	1.4	2.2	2.2
Cobalt	(-) 0.05	(-) 0.05	(-) 0.05
Molybdenum	(-) 0.1	(-) 0.1	(-) 0.1
Tin	(-) 0.5	(-) 0.5	(-) 0.5

(-) refers to "less than"

B C LABORATORIES, INC.

By *J. J. Eglin*
J. J. Eglin

LABORATORIES, INC.

J. J. EGLIN, REG. CHEM. ENGR.

4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911



Texaco Producing, Inc.
P. O. Box 5197-X
Bakersfield, California 93388

Attention: Rob Segar

Date Reported: 10/6/86
Date Received: 9/15/86
Laboratory No.: 16455 - 16457

Fluoride

Iron

Zinc

Chromium

Selenium

Boron

Cobalt

Molybdenum

Tin

Specification Electrode EPA 340.2
Inductively Coupled Plasma 200.7
Inductively Coupled Plasma 200.7
Inductively Coupled Plasma 200.7
Hydride Method 270.3
Inductively Coupled Plasma 200.7
Inductively Coupled Plasma 200.7
Inductively Coupled Plasma 200.7
Direct Aspiration 282.1

B C LABORATORIES, INC.

By J. J. Eglin
J. J. Eglin

LABORATORIES, INC.

J. J. EGLIN, REG. CHEM. ENGR.

4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

AGRICULTURE

CHEMICAL ANALYSIS

PETROLEUM



BENZENE

TEXACO ATTN: KERRY MARTIN
P.O. BOX 5197-X
BAKERSFIELD, CA. 93388

DATE OF
REPORT: 12/08/87
LAB NO.: 22255-1

SAMPLE DESCRIPTION:

TEXACO, WEMCO #3 DOORS OPEN

INLET

DATE

SAMPLE COLLECTED:

12/02/87

DATE SAMPLE
RECEIVED @ LAB:

12/02/87

DATE ANALYSIS
COMPLETED:

12/07/87

TEST METHODS: EPA METHOD 624 FOR BENZENE ONLY

Constituent

Results, $\mu\text{g/L}$

MRL, $\mu\text{g/L}$

BENZENE

none detected

1.00

Comments:

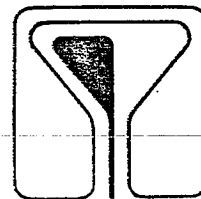
By

J. J. Eglin
Eglin

Analyst

ZALCO LABORATORIES, INC.

Analytical & Consulting Services



Texaco Producing Inc.
Box 5197X
Bakersfield, CA 93308

Attention: Larry Landis

Sample Description: Junction Outlet

Laboratory No: 6037-2
Date Received: 8-27-85
Date Reported: 9-13-85

Parameter	Method*	Results	Parameter	Method*	Results
Alkalinity		310.1	Boron, B	**404A	1.9
as HCO ₃			Antimony, Sb		<0.08
Calcium, Ca		215.1	Beryllium, Be		<0.002
Chloride, Cl	**407A		Cobalt, Co		0.01
Copper, Cu		220.1	Molybdenum, Mo		<0.04
M.B.A.S.		425.1	Thallium, Tl		<0.04
Iron, Fe		236.1	Tin, Sn		282.1
Magnesium, Mg		242.1	Potassium, K		258.1
Manganese, Mn		243.1	Nickel, Ni		249.1
Sodium, Na		273.1	Vanadium, V		286.1
Sulfate, SO ₄		375.3	Total Phosphorus		365.4
Sulfides, S		376.1	Total Nitrogen		351.4
Sulfites, SO ₃		377.1	Organic Nitrogen (Calc.)		31.1
Total Dissolved			Ammonia Nitrogen		350.3
Solids @ 105 °C		160.3	Chemical Oxygen		410.1
Total Suspended	**209C		Demand		81.2
Solids			Biochemical Oxygen		1.9
Total Hardness			Demand		405.1
as CaCO ₃		130.2	Total Organic		415.1
Oil & Grease		413.1	Carbon		29
Zinc, Zn		289.1			
Arsenic, As		206.3			
Barium, Ba		108.1			
Cadmium, Cd		213.1			
Chromium, Cr		218.1			
Lead, Pb		239.1			
Mercury, Hg		245.1			
Nitrate-Nitrite,					
NO ₃		352.1			
Selenium, Se		270.3			
Silver, Ag		272.1			
Fluoride, F		340.2			

Richard L. Penner
Chief Chemist

Richard L. Penner

General Physical
Specific Gravity @ 60 °F Hydrometer 1.000
pH 7.8
Color 150-150-Error
Odor 140.1
Specific Cond., ulmos/cm @ 25 °C 120.1 888
* 1983 Revised EPA-600/4-79-020
**Standard Methods Procedure 16th Ed

4309 Armour Avenue Bakersfield, California 93308

(805) 395-0539

R/LP/lrh

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 75- 80

APPROVAL OF WATER QUALITY CONTROL PLANS FOR THE
SACRAMENTO RIVER, SACRAMENTO-SAN JOAQUIN DELTA,
SAN JOAQUIN RIVER, AND TULARE LAKE BASINS

WHEREAS:

1. It is the responsibility of the State Water Resources Control Board and the California Regional Water Quality Control Board, Central Valley Region, to regulate the activities and factors which affect or may affect the quality of the waters of the State in order to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters, and the beneficial uses involved.
2. Regulation 40 CFR 131.202, pursuant to the Federal Water Pollution Control Act Amendments of 1972 (PL 92-500), requires each state to submit water quality control plans for all basin planning areas within the state by July 1, 1975, or with an extension from the Regional Administrator of EPA no later than July 1, 1976.
3. The California Regional Water Quality Control Board, Central Valley Region, has conducted public hearings after notice to all interested persons, in accordance with PL 92-500 and the California Water Code, and has considered the evidence introduced at those hearings. The Regional Board subsequently adopted the water quality control plans for the Sacramento River, Sacramento-San Joaquin Delta, San Joaquin River, and Tulare Lake Basins.
4. Section 13245 of the Water Code provides that the State Board must approve all water quality control plans and revisions thereof before they become effective.
5. The State Board held a hearing on August 12, 1975, at which time testimony was received from interested persons regarding the proposed water quality control plans.
6. The water quality control plans are a part of the State's continuing planning process and will be updated annually to reflect changing conditions including but not limited to the Delta water quality objectives.
7. Issues which are not fully resolved in the plans at this time will be considered during the scheduled revisions of the plans.
8. The State Board will reopen the Delta water rights hearings not later than July 1, 1978, for the purpose of receiving further

evidence relating to salinity control, protection of fish and wildlife in the Delta, and coordination of terms and conditions of the permits involved in Decision 1379 with terms and conditions arising in subsequent decisions concerning the Delta.

9. By approval of these plans the Board does not intend to affect negotiations among various Delta water agencies and the state and federal governments regarding agreements on water quality and water quantity in the Delta.
10. The State Board will be holding public hearings for the purpose of revising the water quality objectives, as appropriate, prior to July 1, 1978.
11. Any additional flow releases required to implement the water quality objectives will be determined by separate water rights hearings pursuant to the appropriate provisions of Title 23, California Administrative Code.
12. Part I of the water quality control plans includes all necessary elements of water quality control plans in accordance with Sections 13241 and 13242 of the Water Code and federal requirements, and Part II consists of supportive planning information.
13. The approval of water quality control plans is categorically exempt from the requirements of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.) in accordance with Section 15108 of the State EIR guidelines (California Administrative Code, Title 14, Division 6, Chapter 3), and Section 2714(d), Subchapter 17, Chapter 3, Title 23, California Administrative Code.

THEREFORE BE IT RESOLVED:

1. That the State Board approves Part I of the water quality control plans for the Sacramento River, Sacramento-San Joaquin Delta, San Joaquin River, and Tulare Lake Basins in accordance with Section 13245 of the Water Code with the understanding that the stipulated control actions set forth in Chapter V are to be implemented, but that identified actions set forth in Chapter V other than control actions are recommendations to be taken under consideration by the State Board, Regional Board, and other appropriate agencies.
2. That approval of Part I of the plans does not mandate the construction of facilities or mandate activities outside of the State Board's jurisdiction.

3. That the State Board shall file a notice of exemption in accordance with Section 15074 of the State EIR Guidelines.
4. That the staffs of the State and Regional Boards are directed to immediately begin the review of the water quality objectives contained in these plans under the State's continuous planning program with particular emphasis on the beneficial uses and water quality objectives in the Delta, and to propose appropriate modifications thereto, working closely with all interested persons.
5. That approval of the water quality objectives in Part I of the plans should not be construed as representing final action by the State Board on water quality objectives and that water quality objectives may be modified under the State Board's Continuous Planning Process if necessary to protect beneficial uses of the State's water resources.
6. That the Executive Officer is directed to forward copies of the water quality control plans for the Sacramento River, Sacramento-San Joaquin Delta, San Joaquin River, and Tulare Lake Basins to the Environmental Protection Agency in fulfillment of the requirements of PL 92-500.

CERTIFICATION

The State Water Resources Control Board has determined that there is no state mandate for a new program or increased level of service on any unit of local government as a result of the foregoing resolution because such resolution is not an executive regulation pursuant to the Revenue and Taxation Code, Section 2209.

The undersigned, Executive Officer of the State Water Resources Control Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on August 21, 1975.



Bill B. Dendy
Executive Officer

the EC shall be a weighted average. The maximum limiting EC values will be established by the Regional Board on a case-by-case basis.

● Concentration of total coliform in effluent used for irrigation shall be in accordance with limits established in the California Administrative Code, Title 17, Group 12 "Statewide Standards for the Safe Direct Use of Reclaimed Wastewater for Irrigation and Recreation Impoundments," which are:

- MPN of 2.2/100 ml for spray irrigation of produce, surface irrigation of produce, nonrestricted recreational impoundments, and restricted recreational impoundments.
- MPN of 23/100 ml for spray irrigation of food for human consumption processed sufficiently to destroy pathogenic organisms, landscape irrigation, and landscape impoundments.

* ● Poso Creek Subarea, as defined in Resolution No. 71-122 dated November 23, 1970: EC, 1,000 micromhos; chloride, 200 mg/l; and boron, 1.0 mg/l.

● White Wolf Subarea, as defined in Resolution No. 70-178 dated June 25, 1970, for areas overlying Class I irrigation water: EC, 1,000 micromhos; chlorides, 175 mg/l; percent sodium, 60; and boron, 1.0 mg/l; and for areas overlying Class II or poorer irrigation water: EC, 2,000 micromhos; chlorides, 350 mg/l; percent sodium, 75; and boron, 2 mg/l. In areas where groundwater would be Class I except for the concentration of specific indicators, only those indicators will be allowed to exceed the specified limits. In no case shall any indicator be greater than those limits specified for areas overlying Class II irrigation water. The limits of the various irrigation water classes are defined in the original resolution.

Both resolutions previously mentioned are incorporated, in their entirety, herein by reference.

MUNICIPAL WASTEWATER MANAGEMENT

Increasing population and a higher standard of living require continuing consideration of expansion of wastewater treatment facilities. Advances in technology, normal depreciation, and higher performance expectations require continuing consideration of needed replacement. Expansion and replacement of municipal wastewater treatment facilities are integral components of the wastewater management program for the planning period (1974-2000). The management program incorporates two distinct levels of planning effort.

● Feasibility-Level Planning. On the feasibility level is the determination of wastewater management facilities needed in the immediate future, i.e., FY 1974-75 through 1979-80.

● Reconnaissance-Level Planning. Reconnaissance-level planning is the determination of the long-range wastewater management facilities, i.e., beyond 1980 and extending to the year 2000. Facility

(d) On the power of a state agency in the enforcement or administration of any provision of law which it is specifically permitted or required to enforce or administer.

(e) On the right of any person to maintain at any time any appropriate action for relief against any private nuisance as defined in the Civil Code or for relief against any contamination or pollution.

CHAPTER 1.5. SHORT TITLE

13020. This division shall be known and may be cited as the Porter-Cologne Water Quality Control Act.

CHAPTER 2. DEFINITIONS

13050. As used in this division:

- (a) "State board" means the State Water Resources Control Board.
- (b) "Regional board" means any California regional water quality control board for a region as specified in Section 13200.
- (c) "Person" also includes any city, county, district, the state or any department or agency thereof. "Person" includes the United States, to the extent authorized by federal law.
- (d) "Waste" includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation of whatever nature, including such waste placed within containers of whatever nature prior to, and for purposes of, disposal.

NOTE: The Porter-Cologne Act provides that it is intended to implement the legislative recommendations in a report of the State Water Resources Control Board to the Legislature which in turn contains a note that the definition of waste is intended to include all interpretations of the Attorney General of "sewage", "industrial waste", and "other waste" under the former act. These terms were interpreted to include all of the following:

1. Drainage from inoperative and abandoned mines. 26 Ops. Cal. Atty. Gen. 88; see also 37 Ops. Cal. Atty. Gen. 163.
 2. Drainage, flow or seepage containing debris or eroded earth from logging operations; waste materials in dumps; drainage from agricultural operations; liquids from a stratum intercepted by a well which flows through the well into another stratum. 27 Ops. Cal. Atty. Gen. 182.
 3. Discharge of water from a hydroelectric plant. 43 Ops. Cal. Atty. Gen. 302.
 4. Changes in the physical or chemical characteristics of receiving waters caused by extraction of sand, gravel or other materials from a streambed. 32 Ops. Cal. Atty. Gen. 139.
 5. Waste from construction operations, dumped in waters of the state. 16 Ops. Cal. Atty. Gen. 125.
- (e) "Waters of the State" means any water, surface or underground, including saline waters, within the boundaries of the state.
 - (f) "Beneficial uses" of the waters of the state that may be protected against quality degradation include, but are not necessarily limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; esthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.
 - (g) "Quality of the water" or "quality of the waters" refers to chemical, physical, biological, bacteriological, radiological, and other properties and characteristics of water which affect its use.
 - (h) "Water quality objectives" means the limits or levels of water quality constituents or characteristics which are established for the reasonable

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